

considered to teach, or to have suggested, with respect to the subject matter of the pending claims fails for at least the following reasons.

Leuca teaches a method and a system for providing two-way data communications between an airborne data terminal station, such as a personal computer or a laptop computer, and a ground-based network, such as the Internet, using a packet data switching technology (col. 2, lines 48-53). With reference to Fig. 2, Leuca describes, in detail, how a user using a laptop computer on an airplane sends an uplink data request for establishing a high-speed data session through the NATS system (col. 5, lines 29-32). A service initiated acknowledgment message to the laptop computer is sent via the NATS system and a terrestrial gateway (col. 5, lines 35-37). The requested data is transmitted from a ground station to a DBS satellite then to the aircraft via separate circuits (see col. 5, lines 44-48). The laptop computer receiving the requested data from DBS integrator circuit 20, router 15 and internal data pipe 13 (see Fig. 1).

Claim 1 recites, among other features, a mobile communications terminal having a single first antenna, the mobile communications terminal being mounted in a vehicle and in two-way communication with one or more individual data terminal devices in the vehicle and with a satellite through the first antenna; and a base station in two-way communication with the satellite, wherein a return link signal is transmitted from the first antenna of the mobile communications terminal via the satellite to the base station, and a forward link signal controlled by the base station is transmitted from the base station via the satellite and the first antenna to the mobile communications terminal. Independent claims 11 and 18 recite similar features.

The Office Action improperly indicates that a laptop computer of Leuca can reasonably be considered to correspond to a mobile communication terminal with all the

features positively recited in independent claim 1. The analysis of the Office Action fails for at least the following reasons.

First, there is no indication that any laptop disclosed in Leuca (1) has a single first antenna, (2) is mounted in a vehicle, and (3) is in two-way communications with one or more individual data terminal devices, i.e., laptops and/or other personal data terminal devices, and for (4) is in two-way communication with a satellite through the first antenna. The Office Action, in this regard, appears to improperly deconstruct the circuit diagram of Fig. 1 with references to portions of the disclosure of Leuca that the Office Action asserts support the erroneous conclusions.

Second, the Office Action improperly asserts that the return link signal which is recited as being "transmitted from the first antenna of the mobile communication terminal via the satellite to the base station" is considered to correspond to an uplink via a satellite system. Any uplink in Leuca, however, is not from the mobile communication terminal to the base station, but rather in the opposite direction. Additionally, the Office Action appears to assert that NATS corresponds to some satellite system. This is either a misinterpretation or mischaracterization of NATS. NATS, as depicted in Fig. 2, and as described throughout the disclosure, for example, at col. 3, lines 21-23, refers to the North American Terrestrial System, a system of numerous ground receiving stations that receive signals from, for example, telephone systems located in aircraft. In other words, NATS is not a satellite system, as is asserted by the Office Action. Moreover, the signal in Leuca that originates from any systems in the aircraft, i.e., an uplink data request, is described at col. 5, lines 28-48, with reference to Fig. 2, as via the NATS system which responds to the request. Separately the uplink is provided via other communications means, i.e., a DBS system (see col. 5, lines 40-48) and other associated systems depicted in Fig. 1, and not via any apparent antenna associated with the laptop computer.

Leuca specifically states "[p]resently, the available DBS systems are broadcast-only systems. When a two-way DBS satellite link is available, data server 12 will treat such an uplink as another bearer service and uses the satellite broadband network for interconnecting aircraft to a ground-based gateway" (col. 5, lines 54-61). For this disclosure of Leuca alone, it is improper to impute what one of ordinary skill in the art would have known based on the disclosure of Leuca regarding a return signal and a forward signal possibly being transmitted on a same frequency via a satellite, as the Office Action attempts to assert. Additionally, the Office Action references col. 4, lines 52-55 of Leuca to support the proposition that some disclosure of Leuca can reasonably be considered to correspond to a return signal and a forward link signal being transmitted via a same transponder in the satellite. Actually, the relied-on portion of Leuca discusses the broadband satellite systems being envisioned as providing one-way data service as the primary service, this one-way data service being provided via a plurality of channels of digitized video signals through one transponder. Improperly separating selected features in Applicants' claim language to attempt to find the features, the return signal and the forward signal being transmitted on a same frequency and via a same transponder in the satellite anticipated by the reference cited requires an improper construction of the claims and an improper reading of at least the disclosure of Leuca for what they actually teach.

For at least the above reasons, Leuca cannot be relied upon as teaching, or even having suggested, the features for which the Office Action relies upon this reference as teaching.

The Office Action, on page 4, concedes that Leuca fails to teach a feature "the forward link signal using a signaling rate in a range from 512 kbps to 3.5 Mbps. Rather, the Office Action asserts that Montebruno discloses such a feature. The Office Action goes on to conclude that it would have been obvious to a person of ordinary skill in the art at the time the

invention was made to incorporate the teachings of Montebruno into the method of Leuca in order to provide a "qualitatively acceptable service to customers." This analysis of the Office Action fails for at least the following reasons.

First, Montebruno while teaching, in paragraph [0006], an overlapping range of signaling rates, includes an axis subsystem (AST) singling out a coverage area of a cellular telephone network (see paragraph [0001]). Montebruno is specifically directed at "avoiding traffic saturation in the terrestrial transport network" (see paragraph [0052]). For this disclosure alone, one of ordinary skill in the art would not have recognized any advantage from Montebruno, or even compatibility of Montebruno with, terrestrial transport networks such as NATS. Additionally, Montebruno, in paragraph [0054], discusses the leasing of similar channels or satellite transponders or parts of the transponders being particularly cost effective, further strengthening Applicants' above argument that it is not well known in the art to provide a single frequency for transmission and reception of data via a single transponder in a satellite.

Second, there is nothing to suggest that the systems of either Montebruno or Leuca suffer from any "qualitatively" inferior service to customers. This broad conclusory statement regarding a motivation to combine the references suffers at least for not showing, by any objective evidence of record, or by any assertion regarding what would have reasonably been suggested by the body of prior art, why one of ordinary skill in the art may have been motivated to combine the references in the manner suggested. The Federal Circuit has consistently reaffirmed its position, and the U.S. Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. \_\_\_\_\_, 82 USPQ2d 1835, 2007 WL 1237837 (April 30, 2007) favorably endorsed the conclusion, that "rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*,

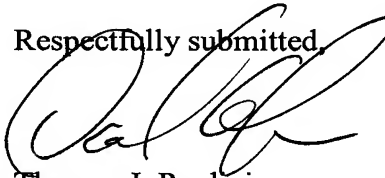
441 F.3d 977 (Fed. Cir. 2006) (quoting *In re Lee*, 277 F.3d 1338, 1343-46 (Fed. Cir. 2002), and *In re Rouffet*, 149 F.3d 1350, 1355-59 (Fed. Cir. 1998). This standard is not met here as no articulated reasoning with some rational underpinning is provided in view of any of the prior art to support the mere conclusory statement made in the Office Action.

For at least the reasons indicated above, Leuca and Montebruno are not combinable in the manner suggested by the Office Action, Leuca cannot be relied upon as teaching those features that the Office Action asserts the reference teaches, and the purported motivation to combine the references fails to meet the articulated standard of even the Supreme Court in the *KSR* decision. As such, the combinations of all of the features positively recited in independent claims 1, 11 and 18 cannot be considered to have been reasonably suggested by any permissible combination of the applied references. Further, claims 2, 3, 5-8, 10, 12, 13, 15, 16, 19 and 22 would also not have been suggested by any permissible combination of the applied references for at least the respective dependence of these claims directly or indirectly on allowable base claims, as well as for the individually separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejection of claims 1-3, 5-8, 10-13, 15, 16, 18, 19 and 22 under 35 U.S.C. §103(a) as being unpatentable over Leuca in view of Montebruno are respectfully requested.

In view of the foregoing, Applicants respectfully submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-3, 5-8, 10-13, 15, 16, 18, 19 and 22 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,  


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